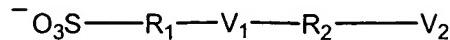


What is claimed is:

1. A compound having the general formula (I):

5



wherein

10

R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

15 R_2 is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V_1 is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

20 V_2 is a moiety comprising a carboxyl group and an unsaturated carbon-carbon bond.

- 25 2. The compound according to Claim 1, wherein the ring system of V_1 is an unsaturated, 5 or 6 membered monocyclic ring system.

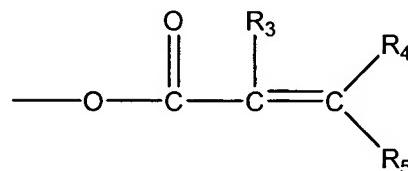
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3. The compound according to Claim 2, wherein the unsaturated or aromatic, 5 or 6 membered monocyclic ring system is selected from the group consisting of imidazole, pyrazole, 1,2,4-triazole, tetrazole and pyrazine.

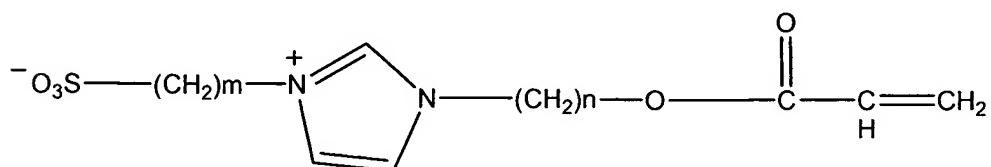
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4. The compound according to Claim 1, wherein the ring system of V_1 is a saturated, 5 or 6 membered monocyclic ring system.

5. The compound according to Claim 4, wherein the saturated, 5 or 6 membered monocyclic ring system is selected from the group consisting of piperazine and imidazoline.
- 5 6. The compound according to Claim 1, wherein the bicyclic ring system of V_1 is an unsaturated, 9 member bicyclic ring system.
- 10 7. The compounds according to Claim 6, wherein the unsaturated, 9 member bicyclic ring system is selected from the group consisting of benzimidazole, purine and indazole.
- 15 8. The compound according to Claim 1, wherein V_2 has the formula (II):



- 20 wherein R_3 , R_4 and R_5 are independently selected from the group consisting of H and C1-C4 alkyl group, wherein the H and C1-C4 alkyl groups are independently substituted or not substituted.
- 25 9. The compound according to Claim 1, having the formula (III):



- 30 wherein $1 \leq m \leq 10$ and $6 \leq n \leq 20$.

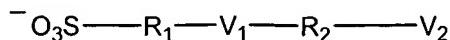
10. The compound according to Claim 1, having the structural formula (IV):

35 $\text{XSO}_3(\text{CH}_2)_m\text{N}(\text{CH}_2\text{CH}_2)\text{N}(\text{CH}_2)_n\text{V}$

where $6 \leq n \leq 20$, $1 \leq m \leq 10$, $X = Na^+, Li^+, NH_4^+$, and V is (methyl)acrylate or another copolymerizable unsaturated group.

11. A process for the preparation of a compound having the general formula (I):

5



wherein

R₁ is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, 10 wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R₂ is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V₁ is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

V₂ is a moiety comprising a carboxyl group and an unsaturated carbon-carbon bond,

20 said process comprising:

a) reacting a compound having a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle,

with an alcohol having the structure:

25 X'-R₂-OH

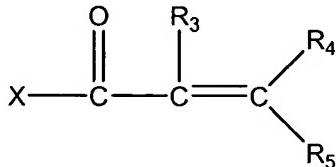
wherein

X' is halogen, and

R₂ is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein 30 hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

b) reacting the product obtained from a) with a sultone; and

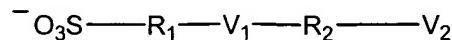
c) reacting the product obtained from b) with a compound having the formula (IIa):



35

wherein
5 X is a halogen; and
 R_3 , R_4 and R_5 are independently selected from the group consisting of H and C₁-C₄ alkyl, independently substituted or not substituted.

10 12. A process for producing an ion conducting membrane, comprising copolymerizing at least one copolymerizable surfactant with a copolymerizable monomer in a bicontinuous microemulsion polymerization mixture, said mixture comprising :
15 i) about 15% to 50% by weight of water;
ii) about 10% to 50% by weight of at least one copolymerizable surfactant having the formula (I) :



wherein

20 R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R_2 is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

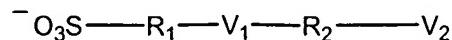
25 V_1 is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

30 V_2 is a moiety comprising a carboxyl group and an unsaturated carbon-carbon bond;

and

35 iii) about 5% to 40% by weight of at least one copolymerizable monomer; wherein said weight percents are based on the total weight of the microemulsion.

13. An ion conducting membrane comprising a copolymer, wherein said copolymer comprises a monomer having the general formula (I):



5 wherein

R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

10 R_2 is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V_1 is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

15 V_2 is a moiety comprising a carboxyl group and an unsaturated carbon-carbon bond.